



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,635	02/20/2004	Mitsuyuki Taniguchi	1785.1005	4147
21171	7590	09/30/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			AURORA, REENA	
			ART UNIT	PAPER NUMBER
			2862	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,635	Applicant(s) TANIGUCHI ET AL.	
	Examiner Reena Aurora	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/20/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, an attachment portion as claimed in claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 - 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Griffen et al. (5,900,727).

As to claim 1, Griffen et al. (hereinafter Griffen) discloses a kit for a rotary encoder including a plurality of signal generating members (24, 24', 24'', fig. 1) for generating mutually different signals, any selected one of the signal generating members (24, 24', 24'', fig. 1) being able to be attached in an exchangeable manner to a rotary body (20, col. 8, lines 27 - 32); and a signal sensing unit (30, fig. 1) arranged in close proximity to one selected signal generating member (24) attached to the rotary body (20), for sensing a signal generated due to a rotation of the signal generating member (24); wherein the plurality of signal generating members are respectively formed in such a manner that numbers of signal-cycles and signal-intervals in signals generated during a unit rotation of respective signal generating members are different from each other, while products of the numbers of signal-cycles multiplied by the signal-intervals in the signals are generally identical to each other (col. 11, lines 15 – 29 and col. 12, lines 4 - 20).

As to claims 2 and 3, Griffen discloses each of the plurality of signal generating members (24, fig. 4) is a circular plate member (42) having an outer circumferential

Art Unit: 2862

surface (48), and wherein a signal generating element (58, 60, fig. 16) for generating the signal is provided on the outer circumferential surface (48) of each signal generating member (24).

As to claims 4 and 5, Griffen discloses each of the plurality of signal generating members (24, 24', 24'') is an annular member having an inner circumferential surface (44), and wherein an attachment portion (56) for detachably attaching each signal generating member (24) to the rotary body (20) is provided in the inner circumferential surface.

As to claim 6, Griffen discloses each of the plurality of signal generating members includes a signal generating element comprising at least one tooth (col. 1, lines 28 - 33).

As to claim 7, Griffen discloses each of the plurality of signal generating members includes a signal generating element (24) comprising at least one magnetized pattern (58, 60, col. 8, lines 55 - 57).

As to claim 8, Griffen discloses a rotary encoder including a first signal generating member (24, fig. 1) for generating a first signal, the first signal generating member (24) being able to be attached to a rotary body (20), in a manner as to be exchangeable with a second signal generating member (24') for generating a second signal different from the first signal; and a signal sensing unit (30) arranged in close proximity to the first signal generating member (24) attached to the rotary body (20), for sensing the first signal generated due to a rotation of the first signal generating member (24); wherein the first signal generating member (24) is formed in such a manner that a

Art Unit: 2862

number of signal-cycles and a signal interval in the first signal generated during a unit rotation of the first signal generating member is different from a number of signal-cycles and a signal-interval in the second signal generated during a unit rotation of the second signal generating member, while a product of the number of signal-cycles multiplied by the signal-interval in the first signal is generally identical to a product of the number of signal-cycles multiplied by the signal interval in the second signal (col. 8, lines 27 - 32) and (col. 11, lines 15 - 29 and col. 12, lines 4 - 20).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Reena Aurora